

**Applicant:** James A. Proctor, Jr.  
**Application No.:** 09/772,176

**REMARKS/ARGUMENTS**

After the foregoing Amendment, claims 1, 2, 5-14, 16, 17, 19, 21, 22, 25-37, 39, and 42 are currently pending in this application. Claims 1, 16, 17, 19, 21, 39, and 42 are amended. Claim 15 is canceled without prejudice.

**Claim Rejections - 35 USC §112**

Claims 19 and 39 are rejected under 35 USC §112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter of the invention. Claims 1, 19, 21, and 39 have been amended. The Applicant respectfully submits that claims 19 and 39 as amended, in conjunction with amended claims 1 and 21 meet the requirements of USC §112, second paragraph. Withdrawal of this rejection is respectfully requested.

**Claim Rejections - 35 USC §102**

Claims 1, 8 – 15, 19, 21, 28 – 35, 39 and 42 are rejected under 35 USC §102(e) as being anticipated by U.S. Patent No. 6,259,919 to Suonvieri et al. (hereinafter "Suonvieri"). Claims 1, 2, 5 – 7, 14, 19, 21, 22, 25 – 27, 34, 39 and 42 are rejected as anticipated by U.S. Patent No. 6,564,042 to Jou et al. (hereinafter "Jou"). The Applicant respectively traverses all of these rejections for the following reasons.

Claim 1 has been amended and now recites the following elements which are not taught in Suonvieri and not taught in Jou:

selecting a parameter to be adjusted from a group comprising an antenna mode, a forward error correction (FEC) coding rate, a number of modulation symbols, and a data transfer rate; and

adjusting the parameter based on the metric to compensate for the changes affecting the signaling path, the adjusting including at least one of: minimizing the data transfer rate while maintaining the signal path, minimizing a power level while maintaining the signal path, adjusting the forward error correction coding rate, adjusting the number of modulation symbols, or adjusting the mode of a mobile station multi-mode antenna.

(emphasis added). Concerning “adjusting the number of modulation symbols”, see the Applicant’s specification, page 11, lines 12-18, and page 13, line 28, to page 14, line 4. Suonvieri discloses detecting a “fast speed” mobile unit and, if the speed exceeds a threshold, handing over the mobile unit to a larger cell (See col. 1, lines 27 – 33; Figure 1; col. 3, lines 3 – 19 and 39—44). In Suonvieri a mobile station antenna characteristic is not changed; all changes occur at one or more base stations (See col. 3, lines 56—60; col. 5, lines 34—40). Suonvieri does not teach the above quoted elements of claim 1. The only action arising from measurements taught by Suonvieri is the aforementioned handover, which does not “minimize a power level” as asserted by the Examiner. Instead, a handover to a larger cell

reduces the number of handovers across micro-cells, which affects quality of connection between the “fast speed” mobile unit and the communication network.

Suonvieri does not teach the first element of claim 1 quoted above. Suonvieri is silent as to selecting a parameter and is silent as to specific parameters listed in this element.

For all of these reasons, claim 1 is not anticipated by Suonvieri.

Jou is directed to detecting the speed of a mobile unit and, based on the detected speed, selecting a transmission power which simultaneously achieves predetermined target values for a data rate, a frame error rate, and a frame length, with a predetermined choice of forward error correction coding (col. 4, line 64 – col. 5, line 9). For determining the speed, Jou teaches three methods (col. 6, lines 1-5), none of which includes measuring a phase. Jou does not teach any of the features of claim 1 emphasized above, including adjusting a number of modulation symbols. Jou is silent concerning the adjustment of any signal parameter except transmit power, which is accomplished by choosing from among predetermined values for a gain and a pilot channel power level (col. 4, line 64 – col. 5, line 9). As pointed out above, Jou requires simultaneously meeting target values for a data rate, a frame error rate, and a frame length; while claim 1 has no corresponding limitation.

Jou does not teach the first element of claim 1 quoted above. Jou is silent as to selecting a parameter and is silent as to specific parameters listed in this element.

For all of these reasons, claim 1 is not anticipated by Jou.

Claims 2, 5—14, 16, 17, and 19 are dependent on claim 1 and are therefore not anticipated by either Suonvieri or Jou for the reasons presented above.

Amended claims 21 and 42 recite features corresponding to that of claim 1 quoted above and are therefore not anticipated by either Suonvieri or Jou for reasons corresponding to those presented above. Claims 22, 25-37 and 39 are dependent on claim 21 and are therefore not anticipated by any of the cited references.

Cancellation of claim 15 renders rejection of this claim moot.

Based on the arguments presented above, withdrawal of the rejection of claims 1, 2, 5-14, 19, 21, 22, 25-35, 39, and 42 under 35 USC §102(e) is respectfully requested.

**Claim Rejections - 35 USC §103**

Claims 16, 17, 36, and 37 are rejected under 35 U.S.C. §103(a) as being unpatentable over Suonvieri in view of U.S. Patent No. 5,940,454 to McNicol et al. (hereinafter "McNicol"). The Applicant respectfully disagrees for the following

**Applicant:** James A. Proctor, Jr.  
**Application No.:** 09/772,176

reasons. Claim 16 and 17 are dependent on claim 1. Claims 36 and 37 are dependent on claim 21. As presented above, claims 1 and 21 recite features not taught in Suonvieri. McNicol does not remedy the deficiencies of Suonvieri. McNicol is directed to selecting an antenna based on signal quality and is concerned only with antennas of fixed subscriber units, not mobile units. See Abstract and col. 6, lines 3-8. McNicol is silent as to the above quoted elements of claim 1 and the equivalent elements of claim 21. Furthermore, McNicol teaches away from the use of omnidirectional antennas at col. 9, lines 9-13.

Based on the arguments presented above, withdrawal of the rejection of claims 16, 17, 36, and 37 under 35 U.S.C. §103(a) is respectfully requested.

### **Conclusion**

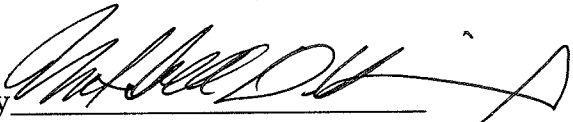
If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

**Applicant:** James A. Proctor, Jr.  
**Application No.:** 09/772,176

In view of the foregoing amendment and remarks, the Applicant respectfully submits that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

James A. Proctor, Jr.

By   
\_\_\_\_\_  
Mitchell D. Hirsch  
Registration No. 54,170

Volpe and Koenig, P.C.  
United Plaza  
30 South 17th Street  
Philadelphia, PA 19103-4009  
Telephone: (215) 568-6400  
Facsimile: (215) 568-6499

MDH/pp  
Enclosure